

CLAIMS

I claim:

1. A modular cushioned insole support system intended for use in connection with footwear, the system comprising:
 - a) a heel piece having an upper and lower surface and further defining within said upper surface a first interlocking means, and
 - b) a forefoot piece selected from a plurality of forefoot pieces having different widths, thicknesses, and impact cushioning characteristics, and each having a dorsally disposed second interlocking means capable of being accommodated within said first interlocking means,
the assembled system and its components having a medial and a lateral side relative to the anatomic orientation of the system.
2. The modular cushioned insole support system of Claim 1 further provided with means for retaining said second interlocking means within said first interlocking means.
3. The modular cushioned insole support system of Claim 2 wherein said means for retaining is an adhesive.
4. The modular cushioned insole support system of Claim 2 wherein said means for retaining is a mechanical fastener.
5. The modular cushioned insole support system of Claim 2 wherein said first part of an interlocking means is a longitudinal channel.

6. The modular cushioned insole support system of Claim 2 wherein said second interlocking means is a tongue.

7. The modular cushioned insole support system of Claim 1, wherein said forefoot piece has a hardness of 25 to 50 shore C.

8. The modular cushioned insole support system of Claim 1, wherein said forefoot piece is provided with a cushioning means.

9. The modular cushioned insole support system of Claim 8, wherein said cushioning means is selected from the group consisting of gel sacs, air sacs, elastomeric material, spongiform material, and resilient cushioning material.

10. The modular cushioned insole support system of Claim 9, wherein said cushioning means is disposed such that it defines internal apertures that facilitate deformation in response to compressive forces and reformation when those forces are relieved.

11. The modular cushioned insole support system of Claim 8, wherein said cushioning means is further capable of initiating an exothermic chemical reaction.

12. The modular cushioned insole support system of Claim 1, wherein said heel piece is selected from a plurality of heel pieces each having a different width.

13. The modular cushioned insole support system of Claim 1, wherein said heel piece is selected from a plurality of heel pieces each having a different torsional geometry.

14. The modular cushioned insole support system of Claim 1, wherein said heel piece has a hardness of 50 to 75 shore C.

15. The modular cushioned insole support system of Claim 1, wherein said heel piece defines within said channel a centrally disposed aperture capable of accommodating a corresponding protuberance in said tongue, such that in use said protuberance is disposed within said aperture.

16. The modular cushioned insole support system of Claim 1, wherein said system further comprises a heel cup disposed along said lower surface of said heel piece such that said heel piece is partially supported by said heel cup.

17. The modular cushioned insole support system of Claim 16, wherein said heel cup is disposed along said lateral side of said heel piece.

18. The modular cushioned insole support system of Claim 16, wherein said heel cup is disposed along said medial side of said heel piece.

19. The modular cushioned insole support system of Claim 1, wherein said forefoot piece has a perimeter and a centrally disposed foot accommodation means with a transition zone therebetween.

20. The modular cushioned insole support system of Claim 19, wherein said transition zone between is relatively abrupt.

21. The modular cushioned insole support system of Claim 19, wherein said forefoot piece has a first thickness disposed about said foot accommodation means transitioning to a second thickness in the region of said foot accommodation means.

22. The modular cushioned insole support system of Claim 21, wherein said transition between said first thickness and said second thickness is tapered such that a foot may be cradled within said foot accommodation means.

23. A modular cushioned insole support system intended for use in connection with footwear, the system being arranged as a kit and comprising:

- a) a plurality of forefoot pieces having different widths, thicknesses, and impact cushioning characteristics, with a durometer range of 25 to 50 shore C, and each defining a first interlocking means
- b) a plurality of heel pieces having a durometer range of 50 to 75 shore C and each defining a second interlocking means

whereby a consumer selects and assembles one of said forefoot pieces and one of said heel pieces by engaging said first and second interlocking means to form a custom insole.